

Why does cirrhosis belong to Laennec?

Jacalyn M. Duffin, MD, FRCPC, PhD

It is well known that Laennec gave cirrhosis its name from the Greek word *kirrhos* (tawny), in a brief footnote to his treatise *De l'auscultation médiate* (1819), but the eponym "Laennec's cirrhosis" is rarely used in France. This article explores the reasons why North American physicians commemorate a French chest specialist in their name for a hepatic lesion that had first been recognized in England more than a century earlier. It traces the content and fortunes of Laennec's essay on cirrhosis, part of an incomplete manuscript, including its eventual partial publication by a British editor in the original French. A survey of 19th-century literature on cirrhosis revealed that it was not until the publication of William Osler's textbook that the eponym came into common use. The geographic patterns of influence of Osler's book and the differing preoccupations of physicians on the two sides of the English Channel probably combined to result in the paradoxical employment of this eponym.

On sait que la cirrhose a été nommée par Laennec d'après le mot grec *kirrhos* (jaunâtre) dans un bref renvoi du traité *De l'auscultation médiate* (1819). Mais l'auteur prétend que l'appellation "cirrhose de Laennec" a peu cours en France. Elle s'attache à découvrir pourquoi les médecins nord-américains donnent le nom d'un phtisiologue français à une lésion déjà décrite en Angleterre plus d'un siècle auparavant. Elle retrace le texte et le devenir de l'essai de Laennec sur la cirrhose, partie d'un manuscrit inachevé, y compris la publication partielle en français que devait en faire un encyclopédiste britannique. La revue de la littérature du XIX^e siècle montre que l'appellation éponymique en question n'est devenue courante qu'avec la parution du manuel de William Osler. Ce seraient la diffusion de ce manuel et les préoccupations

divergentes des médecins de part et d'autre de la Manche qui expliqueraient le paradoxe terminologique précité.

René Théophile Hyacinthe Laennec (1781–1826) invented the stethoscope and made major contributions to the pathological understanding and diagnosis of diseases of the chest, yet his name is associated with atrophic, alcoholic cirrhosis of the liver. The eponym "Laennec's cirrhosis" is especially popular in the United States and in both English and French Canada. In France, Laennec's native country and the place most likely to laud his achievements, it is scarcely known. The following is a report on my investigation into what this pulmonary specialist contributed to hepatology and why his "achievement" seems to be recognized everywhere but in his homeland.

Laennec gave cirrhosis its name from the Greek word *kirrhos*, meaning tawny yellow. According to most medical history textbooks this baptism was first published in a footnote commenting on the incidental finding of yellow nodules in the liver of Jean Edmé, a patient described in the first and second editions of Laennec's treatise *De l'auscultation médiate*.^{1,2} Some historians cite this small digression as the first pathological description of the disorder, but they are mistaken. More detailed descriptions of cirrhosis had already been published by the British pathologists John Browne³ (1642–1700) and Matthew Baillie⁴ (1761–1823). Although these men had used different names for the lesion, both had recorded its appearance accurately, and Baillie had linked it to excessive alcohol consumption.

Eponyms have long been notorious for their shortcomings. With "Laennec's cirrhosis", added to the common fault of "mistaken hero", is a curious, if not surprising, geographic distribution — the opposite, in fact, of what would be predicted. I first noticed the French unfamiliarity with the eponym while working in Paris. A survey of current textbooks on liver disease and internal medicine quickly confirmed my impression that, although French dictionaries recognize the eponym "Laennec's cirrhosis", French practitioners and writers of textbooks do not use it. The same survey also revealed that North Americans favour this eponym more than do the British. This preference is all the more baffling because John Forbes (1787–

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Reprint requests to: Dr. Jacalyn M. Duffin, Jason A. Hannah postdoctoral fellow, Department of History of Medicine, Faculty of Health Sciences, University of Ottawa, Ottawa, Ont. K1H 8M5

1861), the translator of Laennec's book, shortened the alleged eponymic footnote and eliminated the word "cirrhosis" from the first two English editions.^{5,6} Why does the anglophone medical community ignore the work of their own great pathologists to venerate a French chest man in a name for a liver disease, when his modest contribution had not even been translated into English?

Some features of the puzzle were not at all mysterious. The philologic digression that led to the naming of the disease was entirely in keeping with Laennec's penchant for the classics. During the iconoclastic times of the French Revolution, when the "dead languages" were suppressed, Laennec continued to lecture in Latin. He taught himself Greek to be able to read Hippocrates in the original.⁷ In the winter of 1810-11 he prepared for a competition for the Chair of Hippocratic Medicine at the Paris Faculty, but to his bitter disappointment the position was abolished.⁸ His word "stethoscope" was a careful and lovingly researched derivation from Greek.⁹

That Laennec made a discovery in extrapulmonary pathology is also quite in keeping with our knowledge of his talents. From his student days he was recognized as a brilliant pathologist: he wrote original descriptions of several pathological entities, including peritonitis, bronchiectasis, emphysema and pulmonary edema, all without the use of the microscope. Before his graduation, in 1804, he began to assemble his observations into what he hoped would become a book, but he was forced to abandon the task a few years later, when his never very solid financial situation became so precarious that the only solution was full-time practice.

Several hundred pages of Laennec's incomplete manuscript *Treatise of Pathological Anatomy* (1804-1808) have been preserved and are on display at Musée Laennec, université de Nantes. They contain a 16-page essay devoted to "les cirrhoses". Seeming not to have recognized Baillie's earlier description of liver "tubercles" as the same condition, Laennec announced that he had been the first to notice the lesion. He defined cirrhosis as a tawny yellow tissue and divided it into three or four "sorts", depending on the structure: masses, plaques, cysts and degenerations. The main part of the essay was devoted to a detailed pathological description of the first type, "cirrhoses en masses". It emphasized the presence of granulations disseminated throughout a firm, shrunken liver with a rugged folded surface and is an excellent description of what today would be called micronodular, or Laennec's, cirrhosis. Laennec pointed out that the reduced volume of the liver presented one of the main obstacles to the condition's premortem diagnosis, because the characteristic surface of the liver could rarely be palpated below the ribs. He did not speculate on the pathogenesis of cirrhosis, nor did he mention nutrition or the use or abuse of alcohol.

The 1805 case history and autopsy of Françoise Cuvi, a 39-year-old domestic, was included

to illustrate these statements. Cuvi may have embodied Laennec's first encounter with the disease that would ultimately bear the pathologist's name; however, Laennec claimed that he had seen cirrhosis often and that it was the most common of all liver lesions. He did not comment on the drinking habits of either patient, Cuvi or Edmé.

"Cirrhoses occurring in plaques and in cysts" were discussed briefly at the end of the chapter. Laennec said he had observed them only a few times, when he was still a student, and could not provide precise details. Nevertheless, these short descriptions are sufficiently clear to suggest the modern entities of testicular mesothelial proliferations and ovarian tumours respectively. The last division that Laennec proposed, more cautiously, was cirrhosis arising as a degenerative process in the liver or in other organs. Based on another observation recalled from his student days, this brief description is suggestive of acute fatty change. The common feature in the macroscopic examination of all these types of "cirrhosis" was their yellow colour. In other words, Laennec's original description of cirrhosis contained not only modern Laennec's cirrhosis but also much more that is no longer thought to be any form of cirrhosis at all.

Laennec always referred to cirrhosis as a "tawny-flaccid" degeneration and grouped it in his own classification with cancers and tubercles in a collection of pathological lesions that he called "accidental productions". He had coined the term "accidental production" to account for tissues that he thought of as newly arisen without obvious cause.¹⁰ He subdivided these into "analogous" and "nonanalogous" productions. This class corresponds best to the modern term "neoplasm" and its subdivisions "benign" and "malignant". When Laennec first published these ideas, in 1805, he argued with the surgeon-pathologist Guillaume Dupuytren for priority in the recognition of "accidental productions" as a separate group of lesions.^{11,12} Each accused the other of plagiarism. The honour turned out to be dubious, as the concept was soon challenged, then forgotten.

Despite its deficiencies the cirrhosis essay seems to have been far more worthy of an eponym than was the brief footnote 15 years later. Furthermore, in a survey of 19th-century articles on cirrhosis, I discovered that part of the seemingly ignored manuscript had indeed been published. It was cited in a French medical dictionary published in 1824¹³ and 15 years later in the British encyclopedia of Robert Bentley Todd (1809-1860).¹⁴ Todd recognized some of the problems with Laennec's description, but he admired its accuracy and reproduced portions in the original French. The French dictionary and the English encyclopedia both quoted Laennec's statement concerning "masses, plaques et kystes", but they elaborated only on "cirrhoses en masses", leaving the reader to speculate on what the rest of Laennec's cirrhosis might have been. These publications are the true epo-

nymic references and are more apt than the Edmé footnote, now a "cliché" of medical history.

The French and British publications of Laennec's manuscript offer a more plausible reason for the existence of the eponym than does the footnote, but they fail to explain the geographic differences in its present use. Was Todd's encyclopedia more popular in England and North America than the French medical dictionary was in France? Possibly, but the French dictionary seems to have been successful too, since it quickly went into a second edition. In the new edition, however, the article on the liver was very different. Except for a remark on Laennec's role in naming the disease, the previously glorified manuscript was ignored and Laennec's contribution dismissed with the assertion that his "ideas concerning the nature of this disease are generally disregarded".¹⁵ But by whom? Todd, for one, had deliberately overlooked this second edition, already 3 years old when his encyclopedia was published. "Generally" seems to have meant France. Laennec may have been more popular elsewhere than at home. Certainly, his conservative political and religious views had made him a social outcast in his own postrevolutionary medical community. Perhaps this rejection extended to his medical ideas.

Extending my survey of 19th-century publications on cirrhosis into the decades following Laennec's death confirmed the impression that Laennec's ideas on cirrhosis were not popular in France. English and German authors, some of whom had studied with Laennec, continued to mention his name, usually without derision even when they disagreed. The French, however, either ignored Laennec's contribution or criticized it. They attacked the unfortunate etymology, which emphasized colour rather than texture, and as early as 1826 they objected vigorously to Laennec's broad concept of "accidental productions".¹⁶ Eventually others followed suit. On both sides of the Atlantic and across the English Channel, Laennec was said to have been "dazzled"¹⁴ and "dominated"¹⁷ by his "erroneous theory".¹⁸ After Hanot's recognition of "hypertrophic cirrhosis" (primary biliary cirrhosis)¹⁹ came a flurry of journalistic activity. Authors contrasted the new cirrhosis with Laennec's earlier and now highly suspect description. It seems that negative opinion concerning Laennec's "accidental productions" far outweighed the importance of any minor contribution he may have made to hepatic nomenclature. Later, as the debate over "accidental productions" subsided, Laennec's name was associated with atrophic, as opposed to hypertrophic, cirrhosis of the liver, although his original description was of a tissue-specific, not organ-specific, change.

Why did Laennec's essay on cirrhosis slip into oblivion? Many of the 19th-century writers referred to the Edmé footnote in his famous book, but none cited the essay. Todd's criticism preceding the French quotation may have cautioned English would-be admirers. In France, after publi-

cation of the second edition of the dictionary that challenged Laennec and omitted the quote, physicians may not have been aware that the cirrhosis essay had ever existed. Jean-Martin Charcot (1825-1893) perpetuated the inexact reference when he resurrected the Edmé footnote for the patriotic delectation of his medical students, but he ridiculed its brevity and ascribed priority not to Baillie or to Browne but to another Frenchman, Bichat.²⁰

For all that my survey of 19th-century publications may have revealed about the criticism of Laennec's ideas and the origin of the footnote reference, it too failed to explain the geographic variance in the eponym's present use. At the dawn of the 20th century, North Americans did not seem to cite Laennec on the liver with any greater frequency or praise than did the French. Cirrhosis the word may have been used everywhere, but cirrhosis the disease did not yet belong to Laennec.

The one exception is William Osler's *Principles and Practice of Medicine*. In the first and all subsequent editions of his popular text Osler called the atrophic form of portal cirrhosis "the cirrhosis of Laennec".²¹ He accounted for the etymology without criticism of the pathology; however, because Osler gave no reference, one cannot tell which, if either, of Laennec's two published descriptions he used. Osler owned Laennec's book on auscultation, but he also possessed Todd's encyclopedia and Charcot's lessons.

Osler proclaimed "intense interest"²² in all that concerned the French pathologist because of the fundamental importance of auscultation to the organic orientation of modern clinical medicine. He consulted the Laennec manuscripts in Paris,²² purchased Laennec letters,²² commemorated Laennec in the name of the Hopkins tuberculosis study group²³ and inspired Kipling to use Laennec as a subject in the fanciful *Rewards and Fairies*.²⁴ Once aware of a lucid pathological description, Osler was more than willing to accord Laennec a non-pulmonary eponym.

Between 1892 and 1925 Osler's was the most important textbook of medicine in North American and English medical schools, especially his alma mater, McGill University, which has also trained many franco-Canadians. Osler's text went into 10 English editions and several translations, including two into Chinese. Osler, however, was far more influenced by the French than he has been able to influence them: there was only one French-language edition of his book, and his cult à l'américaine does not exist in France. In the 1985 *Science Citation Index* there are 168 references to Osler; of these, only 1 was published in France.

Why, then, do the British, who have long honoured the Canadian-born Osler, seem indifferent to the term "Laennec's cirrhosis"? Osler's book seems to have been and may still be more popular on this side of the Atlantic. Current patterns of Osler veneration tend to support this view: of the aforementioned 168 Osler references in 1985, 103 are American and only 33 British; of Osler com-

memorative journal numbers 80% are Canadian or US, the remainder British.²⁵ Another reason may be the decision of one highly influential British hepatologist not to use the eponym in her textbook on the liver: Sheila Sherlock notes that Laennec "coined" the word,²⁶ but she does not use the eponym, justifiably citing instead the contributions of two British physicians because they had associated the lesion with alcohol.²⁷

As usual, exceptions can be found, including North American texts that do not use "Laennec's cirrhosis" and French dictionaries that do. One French dictionary even comments on the use of the eponym by "les auteurs anglais".²⁸ It seems, however, that eponyms found in dictionaries are not necessarily the ones heard round the bedside and that the presence or absence of a term in a textbook better reflects its popularity. At least one recent French pathology text has adopted the eponym after a century and a half of relative indifference on the part of its Gallic precursors.²⁹ In this case the North American use of a dubious French eponym could be drifting back into France on the wings of dominant medical authority. It certainly cannot be ascribed to any new surge of national medicohistoric sentiment in France, which is, as Osler observed, the last country in the world to need such encouragement.^{30,31}

To sum up, Laennec contributed a credible description of cirrhosis, albeit neither the first nor the best. The appearance of his essay in Todd's encyclopedia may have given him a little extra notice in the English medical world, whereas whatever fame it had enjoyed in France was quickly obliterated by its removal from the second edition of the Ferrus dictionary article. In 19th-century France the preoccupation with defeating Laennec's concept of "accidental production" and the later recognition of "hypertrophic cirrhosis" meant that when Laennec's name was mentioned it was to underline his errors or to separate his older ideas from the new ones being introduced. Finally, reversing the animosity generated by these arguments everywhere but in France, Osler gave the description of atrophic, alcoholic cirrhosis to Laennec and handed it down to his own intellectual heirs, in a pattern that is mirrored, in the geographic sense, by the diverse employment of the eponym.

It may not be so inappropriate that Laennec is remembered for cirrhosis. It was the classicist in him who gave the disease not its definition but its name; it was the francophile in Osler who promoted Laennec's role on unlikely but tolerant shores. Thus, in this peculiar paradox is a lasting testimony to the international origin of modern medical terminology and an unintended, yet probably just, commemoration not of Laennec's excellent pathology but of his passionate philology.

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